

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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In the Matter of )  
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Amendment of Part 15 of the ) ET Docket No. 14-165  
Commission's Rules for Unlicensed )  
Operations in the Television Bands, ) RM-11840  
Repurposed 600 MHz Band, 600 MHz )  
Guard bands and Duplex Gap, and )  
Channel 37 )  

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COMMENTS OF CONNECT AMERICANS NOW  
IN FAVOR OF MICROSOFT CORPORATION'S PETITION FOR RULEMAKING

June 10, 2019



***Introduction:***

As supporters of Connect Americans Now (CAN), we recognize the urgent nature of bridging the digital divide and are submitting these comments to support Microsoft’s Petition for Rulemaking (Petition). We urge the Commission to issue a Further Notice of Proposed Rulemaking (FNPRM) proposing the changes Microsoft has identified in order to help bring broadband connectivity to rural America.

We are a coalition of American businesses, agriculture groups, healthcare trade associations and rural advocates that are concerned with the digital divide’s impact throughout rural America. Without broadband access, students struggle to keep up in the classroom or learn the digital skills they will need to succeed in the modern economy; farmers and ranchers are denied the promise of precision agriculture tools that could help keep them competitive in the modern economy; small businesses can’t retain top talent or tap into the global marketplace; and rural patients are unable to take advantage of telemedicine advancements that could save them time and money while improving outcomes.

In short, the digital divide is holding rural America back. Issuing an FNPRM to better enable the use of TV White Spaces (TVWS) technology would present a measurable step forward in our shared goal of bridging the digital divide and send yet another message to rural America that this Commission is committed to restoring prosperity throughout the heartland.

For most rural Americans, the digital divide persists because of the prohibitive cost of deploying traditional technologies to small customer bases in hard-to-reach areas. TVWS technology offers a great solution to this problem by wirelessly transmitting broadband signals over TVWS frequencies. Signals in TVWS frequencies travel further than those in other bands, and adopting this model is far more economical than attempting to extend fiber to small customer bases in remote and hard-to-reach areas. In other words, this technology can offer internet service providers (ISPs) a business case for reaching rural America and providing affordable broadband service.

The proposals in Microsoft’s Petition will both better enable ISPs to utilize TVWS technology to bring broadband to rural areas and open up the technology to a variety of new user groups and use cases. These changes will bring a world of benefits for the communities we operate in, and we hope the Commission will act quickly to issue an FNPRM advancing these proposed changes. Specifically, the Commission should take the actions outlined below.

***I. Increasing Power Limits In Less-Congested Areas:***

As proposed in the Petition, the Commission should increase power limits in less-congested areas. This would both increase the quality of access in challenging geographies and provide better coverage flexibility. Importantly, this change would have no impact on existing broadcast services, because any increase in power limits would be matched by increases in separation requirements from broadcasters.



**II. *Permitting Higher Power Operations In The First Adjacent Channel To Broadcasters:***

There is an abundance of spectrum that could be used for broadband deployment throughout rural America, but it continues to lie fallow because of current rules. Making Microsoft’s proposed change to this rule would make more spectrum available for TVWS technology and increase the potential for broadband coverage throughout rural America.

**III. *Increasing HAAT Limits:***

Current rules only allow TVWS device operations at a HAAT height of 250 meters, but as you increase the antenna’s height you increase the broadband coverage area. Increasing this height limit could allow ISPs to provide coverage to a wider area of customers who have been waiting for broadband access for far too long. Increasing this limit from 250 meters to 500 meters is a commonsense step that would support the use of TVWS technology to connect rural America.

**IV. *Permitting TVWS Operation On Movable Platforms:***

Throughout rural America, there are a number of ways in which TVWS technology could be used on movable platforms. For example, many students in rural America spend multiple hours on the bus travelling to and from school each day. If they were to have broadband access on the bus, this time could be spent doing schoolwork. In Hillman, Michigan, Allband Communications successfully outfitted a school bus with TVWS technology using an experimental license – and this success could be replicated for students throughout rural America if the Commission were to make this change.

**V. *Supporting IoT Operations Of TVWS:***

There are a number of exciting IoT use cases for TVWS such as precision agriculture that could provide a world of benefits to rural America, but the Commission’s current rules developed some time ago, do not allow for these emerging opportunities. To rectify this issue, we support Microsoft’s proposal to create a new class of devices known as “narrowband IoT devices” to operate in the TVWS spectrum.

Every day, we see the impact the digital divide has on rural communities throughout the country. The Petition provides specific mechanisms to prevent interference with existing broadcasters while maximizing the use of TVWS technology to bring broadband to rural America. It is our hope that the Commission will move forward with an FNPRM that proposes incorporating these changes into the existing rules.



Sincerely,

American Farm Bureau Federation  
American Telemedicine Association  
Connected Nation  
Consortium for School Networking  
Eastern Oregon Telecom  
Economic Development Association of North Dakota  
Gigabit Libraries Network  
League of Oregon Cities  
Livingston Mercantile  
Midwest Food Processors Association  
Mississippi Farm Bureau Federation  
Mississippi Hospitality & Restaurant Association  
Montana Business Leadership Council  
Montana Farm Bureau Federation  
Montana Policy Institute  
Montana Rural Education Association  
National Grange  
National Rural Education Association  
Nevada Farm Bureau Federation  
Next Century Cities  
Oregon Hop Growers Association  
Purdue Center for Regional Development  
South Dakota Farm Bureau Federation  
Washington Farm Bureau Federation  
Wisconsin Rural Schools Alliance